

OIPE

RAW SEQUENCE LISTING DATE: 07/02/2002 PATENT APPLICATION: US/10/081,806 TIME: 14:00:32

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SEQUENCE LISTING

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3 (1) GENERAL INFORMATION:
             (i) APPLICANT: Prudent, James R.
                            Hall, Jeff G.
     6
     7
                            Lyamichev, Victor I.
            (ii) TITLE OF INVENTION: Invasive Cleavge Of Nucleic Acids
     9
     11
           (iii) NUMBER OF SEQUENCES: 69
            (iv) CORRESPONDENCE ADDRESS:
    13
                  (A) ADDRESSEE: Medlen & Carroll, LLP
     14
                  (B) STREET: 220 Montgomery Street, Suite 2200
                                                            ENTERED
     15
                  (C) CITY: San Francisco
                  (D) STATE: California
     17
                  (E) COUNTRY: United States Of America
     18
                  (F) ZIP: 94104
     19
     21
             (V) COMPUTER READABLE FORM:
                  (A) MEDIUM TYPE: Floppy disk
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     23
                  (B) COMPUTER: IBM PC compatible
                  (C) OPERATING SYSTEM: PC-DOS/MS-DOS
     24
                  (D) SOFTWARE: PatentIn Release #1.0, Version #1.30
     25
     27
            (vi) CURRENT APPLICATION DATA:
                  (A) APPLICATION NUMBER: US/10/081,806
C--> 28
                  (B) FILING DATE: 22-Feb-2002
C--> 29
     30
                  (C) CLASSIFICATION:
           (vii) PRIOR APPLICATION DATA:
     40
                  (A) APPLICATION NUMBER: US/08/756,386
     33
     34
                  (B) FILING DATE:
                  (A) APPLICATION NUMBER: US 08/682,853
     37
                  (B) FILING DATE: 12-JUL-1996
     38
                  (A) APPLICATION NUMBER: US 08/599,491
     41
                  (B) FILING DATE: 24-JAN-1996
     42
     44
          (viii) ATTORNEY/AGENT INFORMATION:
                  (A) NAME: Ingolia, Diane E.
     45
     46
                  (B) REGISTRATION NUMBER: 40,027
     47
                  (C) REFERENCE/DOCKET NUMBER: FORS-02564
     49
            (ix) TELECOMMUNICATION INFORMATION:
                  (A) TELEPHONE: (415) 705-8410
     50
                  (B) TELEFAX: (415) 397-8338
     51
        (2) INFORMATION FOR SEQ ID NO: 1:
     54
     56
             (i) SEQUENCE CHARACTERISTICS:
     57 ·
                  (A) LENGTH: 2506 base pairs
     58
                  (B) TYPE: nucleic acid
     59
                  (C) STRANDEDNESS: double
                  (D) TOPOLOGY: linear
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       (ii) MOLECULE TYPE: DNA (genomic)
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152 (2) INFORMATION FOR SEQ ID NO: 2:
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         (i) SEQUENCE CHARACTERISTICS:
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              (A) LENGTH: 2496 base pairs
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              (B) TYPE: nucleic acid
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              (C) STRANDEDNESS: double
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(D) TOPOLOGY: linear
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        (ii) MOLECULE TYPE: DNA (genomic)
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        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:
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250 (2) INFORMATION FOR SEQ ID NO: 3:
252
         (i) SEQUENCE CHARACTERISTICS:
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             (A) LENGTH: 2504 base pairs
254
             (B) TYPE: nucleic acid
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255
             (C) STRANDEDNESS: double
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             (D) TOPOLOGY: linear
        (ii) MOLECULE TYPE: DNA (genomic)
258
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:
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348 (2) INFORMATION FOR SEQ ID NO: 4:
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350
351
              (A) LENGTH: 832 amino acids
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| 153 | 352 (B) TYPE: amino acid | | | | | | | | | | | | | | | | |
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| 1556 | | (C) STRANDEDNESS: single | | | | | | | | | | | | | | | |
| 356 | | | · · · | | | | | | | | | | | | | | |
| Second | | /ii) | | | | | | | | | | | | | | | |
| Met Arg Gly Met Leu Pro Leu Pro Clu Pro Clu Pro Clu Pro Clu Clu | | | | | | | | | | | | | | | | | |
| 1 | | | | | | | | | | | | Lvs | Glv | Ara | Val | Leu | Leu |
| Yal Asp Gly His His Leu Ala Tyr Arg Thr Phe His Ala Leu Lys Gly 366 | | | nr 9 | 011 | 1100 | _ | 110 | пси | 1 | 014 | | | U -1 | 9 | | | |
| 366 | | | λen | Clv | Hic | - | T.011 | λla | ጥኒንጉ | Δra | | Phe | His | Δla | T.e.ii | | Glv |
| Leu Thr Thr Ser Arg Gly Glu Pro Val Gln Ala Val Tyr Gly Phe Ala Add | | Val | АЗР | GLY | | 1112 | пси | nια | - y - | | 1111 | 1110 | 1115 | 1114 | | 1,5 | 011 |
| 35 | | Len | Thr | Пhr | | λrα | G1 v | Glu | Pro | | Gln | Δla | Va 1 | Tur | - | Phe | Δla |
| 1 | | пец | 1111 | | JCI | пта | OLY | Olu | | Val | 0111 | niu | • • • • | | 011 | | |
| 372 50 55 65 67 70 | | Lve | Sar | | T.e.ii | Lvc | Δla | T.e.n | | Glu | Asn | Glv | Asn | | Val | Tle | Val |
| Val Phe Asp Ala Lys Ala Pro Ser Phe Arg His Glu Ala Tyr Gly Gly 375 65 | | цув | | пса | ыса | БУЗ | niu | | Lys | Olu | wpp | 011 | | | | | |
| 375 65 Tyr Lys Ala Gly Arg Ala Pro Thr Pro Glu Asp Phe Pro Arg Glu Leu 95 95 378 378 378 378 378 380 Ala Leu Ile Lys Glu Leu Val Asp Leu Gly Leu Ala Arg Leu Glu Ala Arg Leu Ile Leu Ala Arg Leu Ilu Ilu Lys Lys Ilu Ilu< | | V = 1 | | λen | λl = | Lvc | λ1 a | | Ser | Dhe | Δra | His | | Δla | Ψvr | Glv | Glv |
| 377 Tyr Lys Ala Gly Arg Ala Pro 85 85 90 90 95 380 Ala Leu Ile Lys Glu Leu Val Asp Leu Leu Gly Leu Ala Arg Leu Glu 110 95 380 Ala Leu Ile Lys Glu Leu Val Asp Leu Leu Gly Leu Ala Arg Leu Glu 110 381 100 105 105 110 120 120 120 120 125 120 125 125 125 384 115 366 Ala Glu Lys Glu Gly Tyr Glu Val Arg Ile Leu Thr Ala Asp Lys Asp 130 135 120 125 125 125 386 387 130 135 140 135 140 136 389 Leu Tyr Gln Leu Leu Ser Asp Arg Ile His Val Leu His Pro Glu Gly 390 145 150 150 155 160 155 160 192 160 392 Tyr Leu Ile Thr Pro Ala Trp Leu Fro Gly Fro Ala Trp Leu Tyr Gly Leu Arg Pro 160 170 175 175 160 170 175 395 Asp Gln Trp Ala Asp Tyr Arg Arg Arg Glu Leu Thr Gly Asp Glu Ser Asp Asp 190 195 200 200 200 205 480 481 481 482 482 482 483 483 4 | | | FIIC | кэр | ATG | цуз | | 110 | JCI | 1110 | nr 9 | | Olu | niu | -1- | 011 | |
| 378 Ala Leu Ile Lys Glu Leu Val Asp Leu Leu Gly Leu Ala Arg Leu Glu 381 Ala Leu Ile Lys Glu Leu Val Asp Leu Leu Gly Leu Ala Arg Leu Glu 105 110 </td <td></td> <td></td> <td>Tvc</td> <td>λla</td> <td>G1 17</td> <td>λνα</td> <td></td> <td>Dro</td> <td>Thr</td> <td>Dro</td> <td>Glu</td> <td></td> <td>Dhe</td> <td>Pro</td> <td>Δra</td> <td>Gln</td> <td></td> | | | Tvc | λla | G1 17 | λνα | | Dro | Thr | Dro | Glu | | Dhe | Pro | Δra | Gln | |
| 380 Ala Leu Ile Lys Glu Leu Val Asp Leu Leu Gly Leu Ala Arg Leu Glu 100 100 105 105 100 110 | | TYL | пуъ | АІа | GIY | | АТА | rio | 1111 | rio | | пор | 1110 | 110 | ni 9 | | пса |
| 381 Val Pro Gly Tyr Glu Ala Asp Val Leu Ala Ser Leu Ala Leu Ala Ser Leu Ala Lys Lys Lys Asp Val Leu Ala Ser Leu Ala Lys Lys Glu Gly Tyr Glu Asp Asp Ile Leu Tha Asp Lys Asp Lys Ile Leu Asp Lys Ile Lys Asp Lys Ile His Val Leu His Pro Glu Lys Ile His Pro Ile I | | 71- | Tou | Tlo | Tvc | | Len | Val | A cn | T.e.u | | Cl v | T.011 | Δla | Δrσ | | Glu |
| 383 Val Pro Gly Tyr Glu Ala Asp Asp Val Leu Ala Ser Leu Ala Lys Lys Glu Glu Tyr Glu Val Arg Ile Leu Thr Ala Asp Lys Asp Asp Arg Ile Leu Thr Ala Asp Arg Ile His Val Leu His Pro Glu Gly Gly Gly Ile His Val Leu His Pro Glu Gly Ile His Val Leu His Pro Glu Gly Ile His Val Leu His Pro Ile Gly Ile Ile <td></td> <td>Ala</td> <td>Leu</td> <td>TIC</td> <td></td> <td>GIU</td> <td>пеп</td> <td>Val</td> <td>нар</td> <td></td> <td>цец</td> <td>GLY</td> <td>пец</td> <td>AIG</td> <td></td> <td>БСС</td> <td>Olu</td> | | Ala | Leu | TIC | | GIU | пеп | Val | нар | | цец | GLY | пец | AIG | | БСС | Olu |
| 384 Ala Glu Lys Glu Gly Gly Tyr Glu Val Arg Ile Leu Thr Ala Asp Lys Asp 130 130 135 135 140 140 180 190 190 180 190 145 180 190 145 180 190 145 180 | | Wa I | Dro | Cl w | | Clu | λla | λen | λen | | T.011 | λla | Ser | T.e.11 | | Lvc | Lvc |
| 386 Ala Glu Lys Glu Gly Tyr Glu Val Arg Ile Leu Thr Ala Asp Lys Asp 387 130 135 140 389 Leu Tyr Gln Leu Leu Ser Asp Arg Ile His Val Leu His Pro Glu Gly 150 155 160 392 Tyr Leu Ile Thr Pro Ala Asp Tyr Arg Leu Trp Glu Lys Tyr Gly Leu Arg Pro 165 170 175 175 393 Asp Gln Trp Ala Asp Tyr Arg Ala Leu Thr Gly Asp Glu Ser Asp Asp 180 180 180 180 180 180 180 180 190 175 398 Leu Pro Gly Val Lys Gly Ile Sor Leu Glu Ala Leu Thr Gly Asp Glu Ser Asp Asp 190 180 190 180 190 190 180 190 190 180 190 190 180 190 190 180 190 190 180 190 190 175 | | Vai | FIO | _ | TYT | GIU | ATG | изр | | Val | шси | AIG | 501 | | nia | шуз | 173 |
| 387 Leu Tyr Gln Leu Leu Ser Asp Arg Ile His Val Leu His Pro Glu Gly 390 145 150 150 155 155 160 Glu Gly 150 160 392 Tyr Leu Ile Thr Pro Ala Asp Tyr Arg Blu Leu Trp Glu Ile Thr Gly Ser Leu In Thr Gly Asp Glu Ser Asp Asp Glu Glu Trp Gly Ile Gly Glu Lys Thr Gly Asp Glu Ser Asp Asp Glu Glu Glu Trp Gly Ser Leu Glu Ala Leu Leu Lys Thr Ala Arg Lys Leu Leu 200 190 398 Leu Pro Gly Val Lys Gly Ile Gly Glu Lys Thr Ala Arg Lys Leu Leu 195 200 205 401 Glu Glu Trp Gly Ser Leu Glu Ala Leu Leu Lys Asp Leu Asp Arg Leu 210 220 404 Lys Pro Ala Ile Arg Glu Lys Ile Lys Ile Lu Ala His Met Asp Asp Leu Lys 235 240 405 225 230 235 235 240 407 Leu Ser Trp Asp Leu Ala Lys Val Arg Thr Asp Leu Pro Leu Glu Val 245 255 240 408 225 245 225 250 255 410 Asp Phe Ala Lys Arg Arg Arg Glu Pro Asp Arg Glu Arg Glu Arg Leu Arg Ala Phe 260 265 270 411 260 275 285 412 Arg Ser Leu Glu Glu Glu Glu Glu Ala Pro Trp Pro Pro Pro Glu | | 71- | C1., | | Clu | C1 17 | Пттъ | Clu | | λνα | Tlo | T.e.u | Thr | | Acn | Lare | Δen |
| 389 Leu Tyr Gln Leu Leu Ser Asp Arg Ile His Val Leu His Pro Glu Gly Gly Gly Gly Leu His Pro Glu Lys Tyr Gly Leu Arg Pro Ala Tyr Arg Ala Leu Ala Leu Tyr Arg Ala Leu Ala Leu Leu Ala Leu Ala Leu Ala Leu Ala Leu Ala Ala | | Ala | | пур | GIU | GIY | TÄT | | val | ALG | 116 | пец | | AIG | нэр | цуз | пор |
| 390 145 Incomplete the control of t | | Tou | | Cln | Tou | Tou | cor | | λνα | Tla | Uic | Wa 1 | | Hic | Pro | Glu | Glv |
| 392 | | | тут | GIII | ьeu | пеп | | АЗР | ATY | 116 | 1113 | | пси | 1113 | 110 | GIU | |
| 393 Asp Gln Trp Ala Asp Tyr Arg Ala Leu Thr Gly Asp Glu Ser Asp Asn 180 185 185 185 190 | | | Lou | Tla | mhr | Dro | | Фил | T.011 | Фтъ | Glu | | ጥላን | Clv | T.e.u | Δra | |
| 395 Asp Gln Trp Ala Asp Tyr Arg Ala Leu Thr Gly Asp Glu Ser Asp Asn 180 180 185 190 | | 171 | шец | 110 | 1111 | | AIG | 11P | Deu | ++1 | | Lyo | -1- | 011 | шец | | 110 |
| 396 Leu Pro Gly Val Lys Gly Ile Gly Glu Lys Thr Ala Arg Lys Leu Leu 195 200 Thr Ala Arg Lys Leu Leu Leu 205 Leu Leu Leu 205 Leu Leu Leu 205 Leu Leu Leu 205 Leu Asp Arg Leu Leu Leu 205 Leu Asp Arg Leu Leu 215 Leu Ala His Met Asp Asp Leu Asp Arg Leu Lys 225 Leu Lys 225 Leu Lys 235 Leu Lys 235 Leu Lys 240 407 Leu Ser Trp Asp Leu Ala Lys Arg Arg Clu Lys 245 Leu 250 Leu 250 Leu Arg Ala Phe 255 Leu Arg Ala Phe 255 410 Asp Phe Ala Lys Arg Arg Arg Glu Pro Asp Arg Glu Arg Leu Arg Ala Phe 265 265 270 270 270 413 Leu Glu Arg Leu Glu Phe Gly Ser Leu Leu Leu His Glu Phe Gly Leu Leu 275 280 285 285 180 190 | | λen | Gln | Фтр | 7 l s | | Фулт | λrα | Δla | T.e.11 | | G1 v | Asn | Glu | Ser | | Δsn |
| 398 Leu Pro Gly Val Lys Lys Gly Ile Gly Glu Lys Thr Ala Arg Lys Leu Leu 399 195 200 200 120 205 Leu Leu 401 Glu Glu Trp Gly Ser Leu Glu Ala Leu Lys Asn Leu Asp Arg Leu 402 210 210 215 220 220 220 220 220 220 240 240 250 235 240 240 250 235 240 240 240 240 250 235 240 240 240 250 255 240 240 250 255 240 240 240 250 255 255 240 240 240 250 255 255 255 240 240 240 240 240 250 255 255 255 240 240 240 240 240 240 240 240 240 240 240 240 | | rsp | GIII | пр | | nsp | -7- | nrg | niu | | 1111 | 011 | p | Olu | | p | |
| 399 195 200 205 Leu Ser Leu Glu Ala Leu Leu Lys Asn Leu Asp Arg Leu 210 Leu 210 Ser Leu Glu Ala Leu Leu Lys 220 Leu Asp Arg Leu Lys 220 Leu Lys 240 Leu Lys 235 Leu Lys 240 Leu | | T.e.11 | Dro | Glv | | T.v.c | G1 v | Tle | Glv | | T.vc | Thr | Δla | Arσ | | Len | Leu |
| 401 Glu Glu Trp Gly Ser Leu Glu Ala Leu Leu Lys Asn Leu Asp Arg Leu 402 | | Lea | 110 | _ | , u _ | נעב | 011 | 110 | _ | Olu | 2,0 | | | | | | |
| 402 | | Glu | Glu | | Glv | Ser | Len | Glu | | Len | Leu | Lvs | Asn | | Asp | Arσ | Leu |
| 404 Lys Pro Ala Ile Arg Glu Lys Ile Leu Ala His Met Asp Asp Leu Lys 405 225 | | Olu | | | | 501 | Lou | | | | | -1- | | | | ر ر | |
| 405 | | Lvs | | Ala | Tle | Arσ | Glu | | Tle | Leu | Ala | His | | Asp | Asp | Leu | Lvs |
| 407 Leu Ser Trp Asp Leu Ala Lys Val Arg Thr Asp Leu Pro Leu Glu Val 408 245 250 250 255 410 Asp Phe Ala Lys Arg Arg Glu Pro Asp Arg Glu Arg Leu Arg Ala Phe 411 260 260 265 270 413 Leu Glu Arg Leu Glu Phe Gly Ser Leu Leu His Glu Phe Gly Leu Leu 414 275 280 280 285 416 Glu Ser Pro Lys Ala Leu Glu Glu Glu Ala Pro Trp Pro Pro Pro Glu Gly 417 290 295 300 419 Ala Phe Val Gly Phe Val Leu Ser Arg Lys Glu Pro Met Trp Ala Asp 420 305 310 320 | | _ | | | | | | -1- | | | | | | | | | |
| 408 410 Asp Phe Ala Lys Arg Arg Glu Pro Asp Arg Glu Arg Leu Arg Ala Phe 411 Leu Glu Arg Leu Glu Phe Gly Ser Leu Leu His Glu Phe Gly Leu Leu 414 Clu 275 Leu Glu Ser Pro Lys Ala Leu Glu Glu Glu Ala Pro Trp Pro Pro Glu Gly 416 Glu Ser Pro Lys Ala Leu Glu Glu Ala Pro Trp Pro Pro Pro Glu Gly 417 290 419 Ala Phe Val Gly Phe Val Leu Ser Arg Lys Glu Pro Met Trp Ala Asp 420 305 | | | Ser | Trp | Asp | Leu | | Lvs | Val | Ara | Thr | | Leu | Pro | Leu | Glu | |
| 410 Asp Phe Ala Lys Arg Arg Glu Pro Asp Arg Glu Arg Leu Arg Ala Phe 411 260 265 270 413 Leu Glu Arg Leu Glu Phe Gly Ser Leu Leu His Glu Phe Gly Leu Leu 414 275 280 280 285 416 Glu Ser Pro Lys Ala Leu Glu Glu Ala Pro Trp Pro Pro Pro Glu Gly 417 290 295 295 300 419 Ala Phe Val Gly Phe Val Leu Ser Arg Lys Glu Pro Met Trp Ala Asp 420 305 310 310 315 320 | | 200 | 001 | | | | | -1- | | 5 | | | | | | | |
| 411 Leu Glu Arg Leu Glu Phe Gly Ser Leu Leu His Glu Phe Gly Leu Leu 414 275 | | Asp | Phe | Ala | Lvs | | Àra | Glu | Pro | Asp | | Glu | Arσ | Leu | Arq | | Phe |
| 413 Leu Glu Arg Leu Glu Phe Gly Ser Leu Leu His Glu Phe Gly Leu Leu 414 275 280 280 285 285 285 416 Glu Ser Pro Lys Ala Leu Glu Glu Ala Pro Trp Pro Pro Pro Glu Gly 417 290 295 300 300 305 310 Ser Arg Lys Glu Pro Met Trp Ala Asp 320 | | P | | | | 5 | 5 | | | | , | | | | | | |
| 414 275 280 285 285 285 416 61u Ser Pro Lys Ala Leu Glu Glu Ala Pro Trp Pro Pro Pro Glu Gly 417 290 295 300 419 Ala Phe Val Gly Phe Val Leu Ser Arg Lys Glu Pro Met Trp Ala Asp 420 305 275 310 285 310 315 285 320 | | Leu | Glu | Ara | | Glu | Phe | Glv | Ser | | Leu | His | Glu | Phe | Glv | Leu | Leu |
| 416 Glu Ser Pro Lys Ala Leu Glu Glu Ala Pro Trp Pro Pro Pro Glu Gly 417 290 295 300 419 Ala Phe Val Gly Phe Val Leu Ser Arg Lys Glu Pro Met Trp Ala Asp 420 305 310 315 320 | | | | | | | | 2 | | | | | | | 1 | | |
| 417 290 295 300 419 Ala Phe Val Gly Phe Val Leu Ser Arg Lys Glu Pro Met Trp Ala Asp 420 305 310 315 320 | | Glu | Ser | | Lvs | Ala | Leu | Glu | | Ala | Pro | Trp | Pro | | Pro | Glu | Gly |
| Ala Phe Val Gly Phe Val Leu Ser Arg Lys Glu Pro Met Trp Ala Asp 305 310 315 320 | | | | | _1 _ | | | | | | | - 1 | | | | | - |
| 420 305 310 315 320 | | Ala | | Val | Glv | Phe | Val | | Ser | Ara | Lys | Glu | | Met | Trp | Ala | Asp |
| -27 | | | | | 1 | | | | | | 4 - | | | | - | | |
| 422 Leu Leu Ala Leu Ala Ala Ala Arg Gly Gly Arg Val His Arg Ala Pro | | | Leu | Ala | Leu | Ala | | Ala | Ara | Glv | Glv | | Val | His | Arq | Ala | |
| 423 325 330 335 | | | | | | | | | | | | - , | | | - 3 | | |
| Glu Pro Tyr Lys Ala Leu Arg Asp Leu Lys Glu Ala Arg Gly Leu Leu | | Glu | Pro | Tyr | Lys | | Leu | Arq | Asp | Leu | | Glu | Ala | Arg | Gly | | Leu |
| 426 340 345 350 | | | | - | | | | _ | - | | - | | | _ | | | |

Input Set : N:\Crf3\RULE60\10081806.raw
Output Set: N:\CRF3\07022002\J081806.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the $\langle 220 \rangle$ to $\langle 223 \rangle$ fields of each sequence which presents at least one n or Xaa.

Seq#:7; N Pos. 4,5,181,182,190,366,617,628,685,714,722,738,784,1022,1029
Seq#:7; N Pos. 1038,1053,1098,1105,1206,1227,1244,1251,1252,1253,1350,1380
Seq#:7; N Pos. 1497,1530,1569,1572,1641,1653,1655,1770,1812,2319,2346,2396
Seq#:8; Xaa Pos.2,63,109,186,205,209,227,228,233,240,243,244,247,260,290
Seq#:8; Xaa Pos.329,336,340,368,414,417,418,431,551,605,773,794,798,823,833
Seq#:57; N Pos. 18

VERIFICATION SUMMARY DATE: 07/02/2002 PATENT APPLICATION: US/10/081,806 TIME: 14:00:33

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L:28 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]
L:29 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]
L:974 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0
L:983 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:48
L:992 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:96
L:1007 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:176
L:1010 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:192
L:1013 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:208
L:1016 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:224
L:1019 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:240
L:1022 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:256
L:1028 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:288
L:1034 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:320
L:1037 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:336
L:1040 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:352
L:1049 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:400
L:1052 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:416
L:1076 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:544
L:1085 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:592
L:1118 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:768
L:1121 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:784
L:1127 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:816
L:1130 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:832
L:2269 M:246 W: Invalid value of Alpha Sequence Header Field, [TOPOLOGY:], SeqNo=56
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